Claim Amendments

1. (Currently amended) An apparatus ~~internal combustion engine with a piston cooling system,~~ comprising:

~~a crankcase forming at least one cylinder;~~

~~a piston disposed in the at least one cylinder;~~

~~a crankshaft disposed in the crankcase; and~~

a connecting rod ~~assembly connected to the piston and to the crankshaft,~~ having a first passage and a second passage;

a first groove disposed circumferentially along a bearing surface of the connecting rod, the first groove in constant fluid communication with the first passage;

a second groove disposed circumferentially along a pin interface surface of the connecting rod, the second groove in constant fluid communication with the first passage and the second passage,

wherein ~~the connecting rod assembly forms a channel, and where~~ lubrication fluid flows through the first passage and the second passage ~~channel~~ and sprays on ~~the~~ a piston during engine operation.

2. (Currently amended) The apparatus ~~internal combustion engine~~ of Claim 1, wherein the piston has an underside surface, and wherein the lubrication fluid sprays onto the underside surface.

3. (Currently amended) The apparatus ~~internal combustion engine~~ of Claim 1,

wherein the connecting rod assembly comprises a connecting rod, a connecting rod bearing, a piston pin, and a piston pin bushing;

wherein ~~the connecting rod mounts on the crankshaft with~~ the connecting rod bearing is disposed between the connecting rod and the crankshaft;

wherein ~~the connecting rod mounts on the piston pin with~~ the piston pin bushing is disposed between the connecting rod and the piston pin~~; and~~

~~wherein the piston pin connects to the piston~~.

4. (Currently amended) The apparatus ~~internal combustion engine~~ of Claim 1, wherein ~~the connecting rod bearing forms a bearing groove and a bearing the first hole, wherein~~ the ~~bearing~~ first groove is disposed in a connecting rod ~~connects is in constant fluid communication with to the~~ bearing~~ first hole~~;

~~where the connecting rod forms a first conduit and a second conduit, where the first conduit aligns with the bearing hole;~~

~~where the piston pin bushing forms a first bushing hole and a second bushing hole,~~

~~where the first bushing hole aligns with the first conduit, where the second bushing hole aligns with the second conduit; and~~

~~where the piston pin forms a piston pin groove connected to the first and second bushing holes~~.

5. (Currently Amended) The apparatus ~~internal combustion engine~~ of Claim [[4]] 1, wherein the second groove is disposed in a piston pin bushing~~the first bushing hole and the second bushing hole are 180° apart.~~

6. (Currently amended) The apparatus ~~internal combustion engine~~ of Claim [[4]] 5, further comprising a first bushing hole and a second bushing hole disposed in the piston pin bushing, wherein the first bushing hole and the second bushing hole are in fluid communication with the second groove~~the piston pin groove extends across an entire circumference of the piston pin~~.

7. (Currently amended) The apparatus ~~internal combustion engine~~ of Claim 4, wherein the ~~bearing~~ first groove extends across an entire circumference of the ~~connecting rod~~ bearing surface.

8. (Currently amended) The apparatus ~~internal combustion engine~~ of Claim 4, wherein the connecting rod assembly comprises a nozzle ~~connected to~~ in fluid communication with the connecting rod, wherein the nozzle forms a nozzle opening, and wherein the nozzle opening aligns with the second ~~conduit~~ passage.

9. (Currently amended) ~~The~~ An internal combustion engine comprising the apparatus of Claim [[5]] 1, ~~where the nozzle is disposed adjacent to a target area on an underside surface of the piston~~.

10. (Currently amended) The apparatus ~~internal combustion engine~~ of Claim 4, wherein the crankshaft forms a lubricating fluid supply ~~gallery~~, and wherein the ~~bearing~~ first groove ~~connects~~ is in fluid communication with the lubricating fluid supply ~~gallery~~.

11. (Currently amended) A piston cooling system for an internal combustion engine~~,~~ comprising:

a connecting rod ~~forming~~ having a first passage ~~conduit~~ and a second passage ~~conduit~~;

a first groove in constant fluid communication with the first passage;

a second groove in fluid communication with the first passage and the second passage;

~~a connecting rod bearing connected to the connecting rod, where the connecting rod bearing forms a bearing groove and a bearing hole, where the bearing groove connects to the bearing hole, where the bearing hole aligns with the first conduit;~~

~~a piston pin bushing connected to the connecting rod, where the piston pin bushing forms a first bushing hole and a second bushing hole, where the first bushing hole aligns with the first conduit, where the second bushing hole aligns with the second conduit; and~~

~~a piston pin connected to the piston pin bushing, where the piston pin forms a piston pin groove connected to the first and second bushing holes~~

wherein lubrication fluid flows through the first passage and the second passage to spray on a piston during engine operation.

12. (Currently amended) The piston cooling system of Claim 11, further comprising a piston pin disposed with the connecting rod, wherein the second groove is disposed in the piston pin ~~where the first and second bushing holes are 180° apart~~.

13. (Currently amended) The piston cooling system of Claim 11, wherein the ~~piston pin~~ second groove extends circumferentially along substantially ~~across an~~ entirely a pin interface surface ~~circumference~~ of the ~~piston pin~~ connecting rod.

14. (Currently amended) The piston cooling system of Claim 11, wherein the first ~~bearing~~ groove extends circumferentially along substantially ~~across an~~ entirely ~~circumference~~ a bearing surface of the connecting rod ~~bearing~~.

15. (Currently amended) The piston cooling system of Claim 11, further comprising a nozzle in fluid communication with ~~connected to~~ the connecting rod, wherein the nozzle forms a nozzle opening, and wherein the nozzle opening aligns with the second passage ~~conduit~~.

16. (Currently amended) A method for cooling a piston in an internal combustion engine~~,~~ comprising the steps of:

channeling lubrication fluid through a connecting rod assembly for a piston; and

substantially continuously spraying the lubrication fluid from the connecting rod assembly onto the piston.

17. (Original) The method of Claim 16, where the connecting rod assembly comprises a piston pin, a piston pin bushing, a connecting rod, a connecting rod bearing, and a nozzle.

18. (Original) The method of Claim 16, further comprising sweeping a lubrication fluid spray across an underside surface of the piston.

19. (Original) The method of Claim 16, further comprising lubricating the connecting rod assembly.

20. (Original) The method of Claim 19, further comprising lubricating at least one of a piston pin and a piston pin bushing.

21. (New) The apparatus of Claim 1, wherein the first groove is continuous along a circumference of the bearing surface.

22. (New) The piston cooling system of Claim 11, further comprising a connecting rod bearing disposed on the connecting rod, wherein the first groove and a bearing hole are disposed in the connecting rod bearing, and wherein the bearing hole is in fluid communication with the first groove.

23. (New) The piston cooling system of Claim 11, further comprising a piston pin bushing disposed on the connecting rod, wherein the second groove is disposed in the piston pin bushing.

24. (New) The piston cooling system of Claim 23, further comprising a first bushing hole and a second bushing hole disposed in the piston pin bushing, wherein the first bushing hole and the second bushing hole are in fluid communication with the second groove.